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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,847	08/06/2003	Masanori Onuma	Q76879	6506
23373 7.	590 06/10/2004		EXAMINER	
SUGHRUE MION, PLLC			LE, THANH TAM T	
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800		W.	ART UNIT	PAPER NUMBER
	WASHINGTON, DC 20037 2839			

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	1		
Office Action Commons	10/634,847	ONUMA ET AL.	Q.		
Office Action Summary	Examiner	Art Unit			
	Thanh-Tam T. Le	2839			
The MAILING DATE of this communication app Period for Reply	ars on the cover sheet with the c	orrespond nc addre	ess		
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period wi - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be timwithin the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this comr D (35 U.S.C. § 133).	nunication.		
Status					
1) Responsive to communication(s) filed on 29 Ma	arch 2004.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.				
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the m	nerits is		
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4) $\boxtimes$ Claim(s) <u>1-4</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	n from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-3</u> is/are rejected.					
7) Claim(s) 4 is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) ☐ The specification is objected to by the Examiner	ſ.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correcti					
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO	-152.		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents	have been received.				
2. Certified copies of the priority documents	have been received in Applicati	on No			
3. Copies of the certified copies of the prior		ed in this National St	age		
application from the International Bureau	, , , , ,				
* See the attached detailed Office action for a list of	of the certified copies not receive	ed.			
Attachment(s)	. 🗖				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:		52)		

Art Unit: 2839

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#### **DETAILED ACTION**

## **Drawings**

1. Figures 7 and 8 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Specification

2. The disclosure is objected to because of the following informalities:

Page 10, line 2, "wir" should be changed -- wire --; and line 3, "Th" should be changed -- The --.

Appropriate correction is required.

#### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolle et al. (6,538,203) in view of Shinchi (6,059,617).

Page 2

Nolle et al., figures 1 and 2, disclose a method of connecting terminal fitting (4) and elastic wire (1), comprising the step of:

- providing a terminal fitting (4);
- providing an electric wire (1);
- providing a conductive connecting member (13) formed with an insertion hole;
- inserting the electric wire into the insertion hole of the connecting member;
- compressing the connecting member radially inwardly so as to caulk an inserted portion of the electric wire uniformly over a whole periphery thereof;
   and
- welding the connecting member and the terminal fitting.

Nolle et al. disclose the instant claimed invention as described above except for welding the connecting member and the terminal fitting by applying ultrasonic wave.

Shinchi discloses an ultrasonic wave is applied to connect the electric wire and the wire (column 6, lines 27-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Nolle et al. to have the ultrasonic wave as taught by Shinchi for better connection.

Regarding claim 2, Nolle et al. disclose the connecting member is compressed and shaped by rotary swaging.

Regarding claim 3, Nolle et al. disclose the connecting member including a first hole portion (13c) and a second hole portion (13b) which is larger than the first hole in diameter. The electric wire having a core wire (12) covered with an insulating sheath (3). The core wire is inserted in the first hole portion and the insulating sheath is

Application/Control Number: 10/634,847 Page 4

Art Unit: 2839

inserted in the second hole portion, and the first hole portion and the second hole portion are disposed coaxially with each other. The connecting member is compressed so that the insulating sheath is held in intimate contact with the second hole portion.

# Allowable Subject Matter

- 5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. The following is an examiner's statement of reasons for allowance:

None of the reference discloses the step of press-clamping the conductive connecting member by the clamping portion, in combination with the other claimed elements of the embodiments recited.

Any comments considered necessary by applicant must be submitted no later 7. than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Response to Arguments

Applicant's arguments with respect to claims 1-4 have been considered but are 8. moot in view of the new ground(s) of rejection.

Application/Control Number: 10/634,847

Art Unit: 2839

#### Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL 06/03/04.

Le.

Page 5